

Parklex Prodema USA, Inc.
Design No. PUI/CWP 30-06
Exterior Non-Load Bearing Wall Assembly
NATURCLAD-W F PANELS
NFPA 285
Rating: Meets Conditions of Acceptance

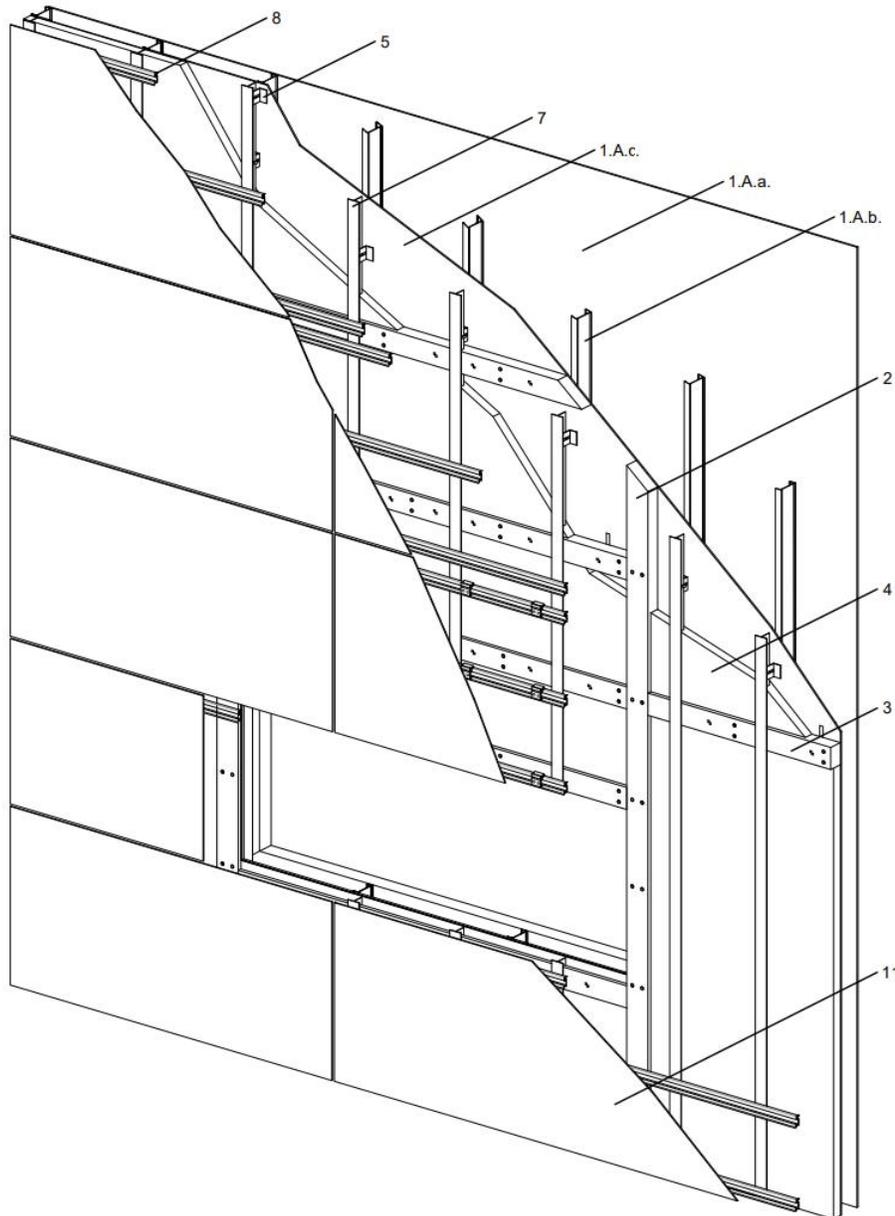


Figure 1

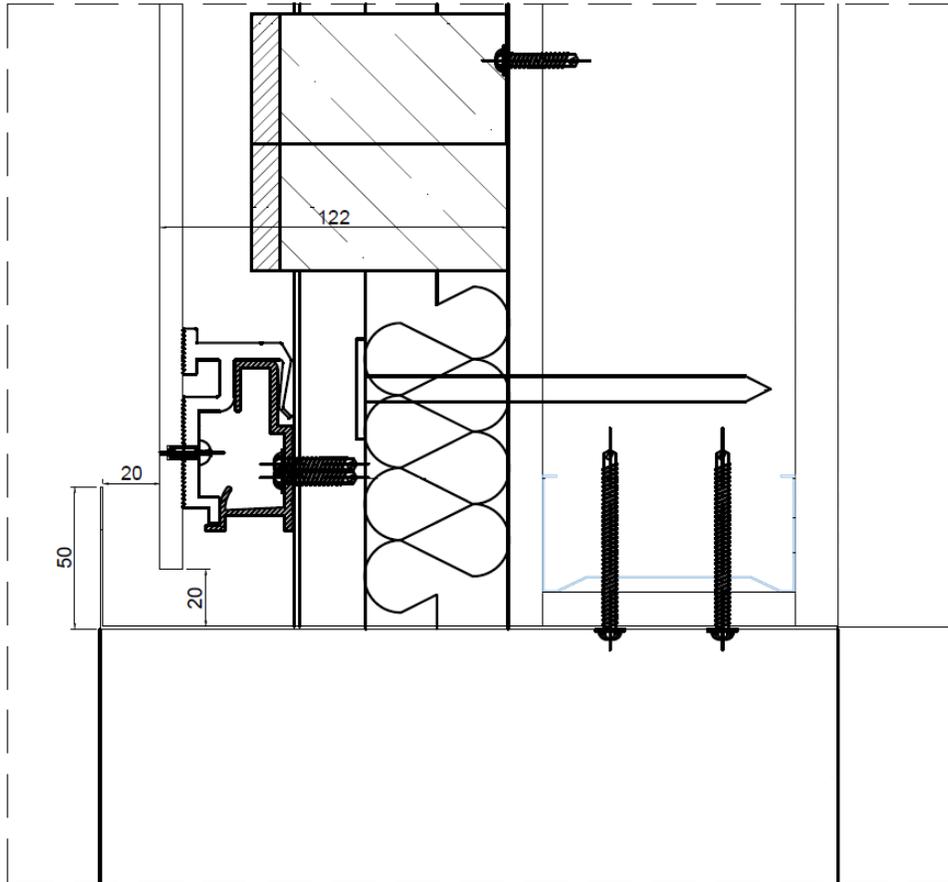


Figure 3

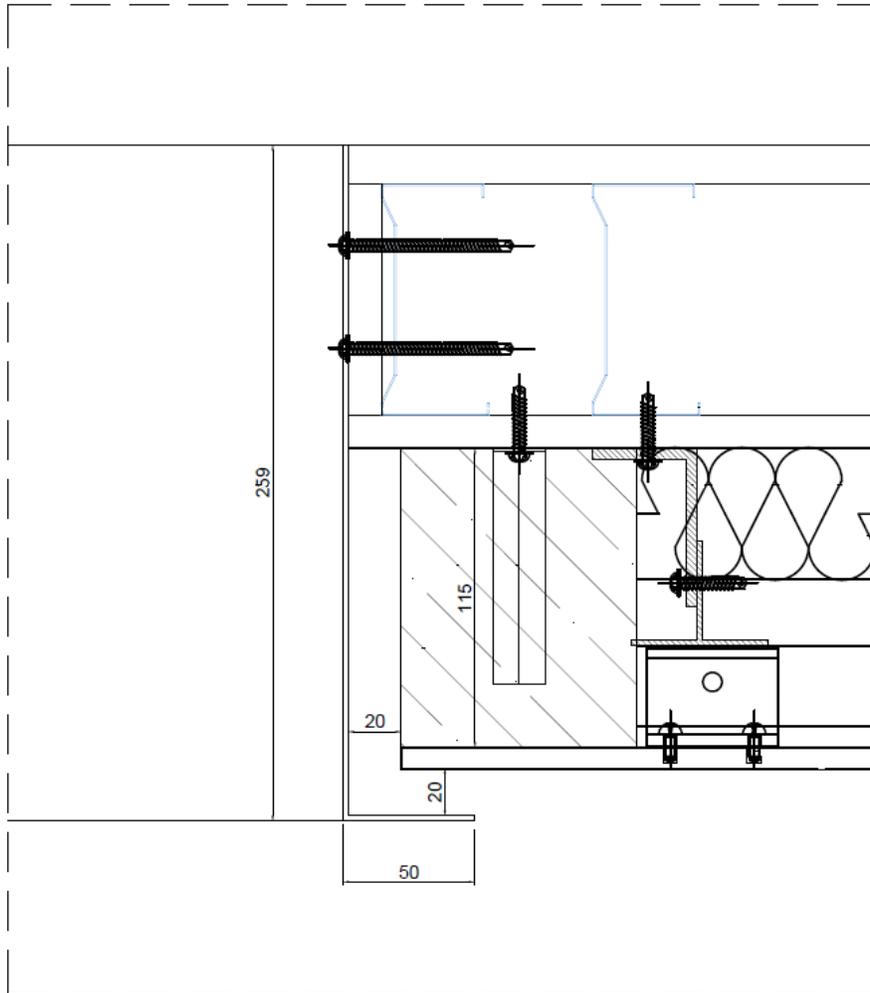


Figure 4

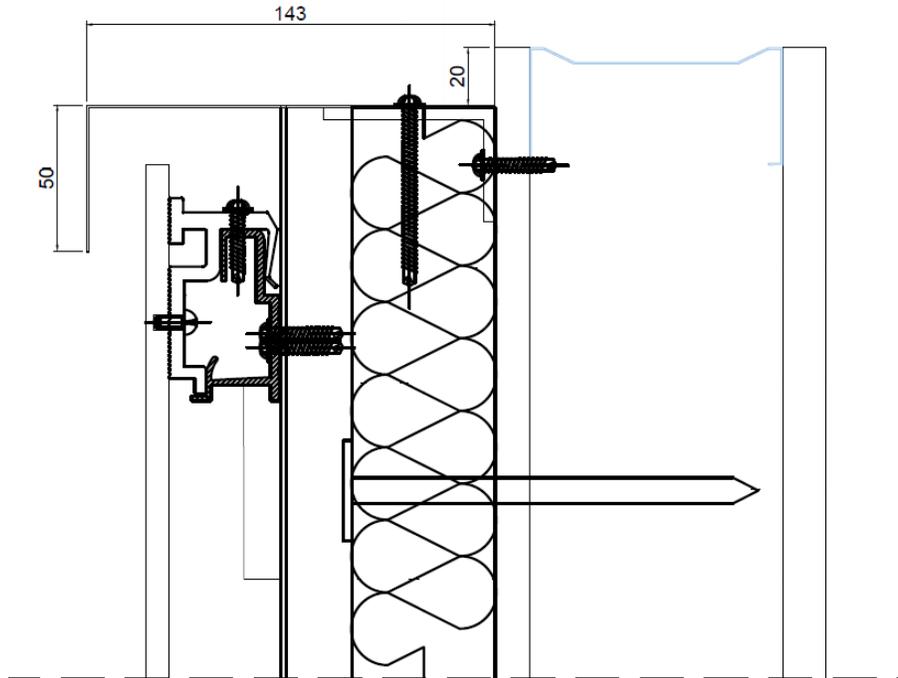


Figure 5

1. **BASE WALL CONSTRUCTION:** Construct a wall assembly that shall comply with the local Building Code or other applicable regulatory requirements as established by the local Authority Having Jurisdiction. The wall shall be one of the following noncombustible constructions:

A. STEEL-FRAMED WALL ASSEMBLY –

a. **INTERIOR CLADDING:** Install nominal 15.9mm thick, Type X, e.g. Knauf LLC GW-TX gypsum boards, on steel studs using self-tapping screws of $\text{Ø}3.5\text{mm} \times 35\text{mm}$ dimensions.

JOINT TAPE AND COMPOUND – (Not Shown) 50mm wide, KNAUF Joint Tape embedded in joint compound, Knauf Readygips, is used along the horizontal and

vertical joints on the interior cladding panels.

b. **STEEL STUDS:** Horizontal U-section steel channels, 1.2mm thick JB Mechanical Services 25mm \times 95mm \times 25mm, are welded to the test frame. Install vertical C-section steel studs, 1.2mm thick JB Mechanical Services, 32mm \times 92mm \times 32mm section, max. spacing 600mm, welded to channels.

c. **EXTERIOR SHEATHING:** Install nominal 15.9mm thick, Type X, e.g. Knauf LLC GW-TX gypsum boards, on steel studs using self-tapping screws of $\text{Ø}3.5\text{mm} \times 35\text{mm}$ dimensions.



JOINT TAPE AND COMPOUND – (Not Shown) 50mm wide, KNAUF Joint Tape embedded in joint compound, Knauf Readygips, is used along the horizontal and vertical joints on the interior cladding panels.

B. CONCRETE CONSTRUCTION.

C. MASONRY CONSTRUCTION.

- 2. VERTICAL CAVITY BARRIER:** Attach Siderise Insulation Ltd RV-90/60 cavity barrier (Intertek Spec ID 55890) to Exterior Sheathing using galvanized mild steel fixing brackets that are bent and shaped in an "L" configuration, 220mm x 25mm x 1mm thick, along with two $\varnothing 4.5$ x 34 mm stainless steel self-drilling screws with metal plug. One cavity barrier must be installed at 30mm from both sides of each opening. Horizontal barriers must terminate at the verticals. The splice joints of the cavity barrier must be secured using 120 mm Siderise RTF120 aluminum jointing tape.
- 3. HORIZONTAL CAVITY BARRIER:** Attach Siderise Insulation Ltd RH25-60/60 cavity barrier (Intertek Spec ID 55890) to Exterior Sheathing using tapered galvanized mild steel fixing brackets with split ends that are bent and shaped in an "L configuration", 335mm x 25mm x 1mm thick, along with two $\varnothing 4.5$ x 34 mm stainless steel self-drilling screws with metal plug. The horizontal cavity barriers must be installed at designated intervals: at 120 mm, above and below the window header and sill, at 1960mm above the window header, with horizontal barriers located at 720 mm and 2930 mm above the window header, extending to the perimeter edge of the specimen. See Figure 2
- 4. EXTERIOR INSULATION:** Install a 50mm thick layer of Rockwool Faced with Reflective Vapor Retarder Aluminum foil SRW.P50D50ALU (Intertek Spec ID 69175), 50kg/m³ density, on the entire outer face of the base wall, except where the cavity barriers were located. Fixed, per slab, with min. five $\varnothing 9$ x 142 mm galvanized steel anchors.
- 5. BRACKETS 1:** 6063-T66 aluminum L-section bracket (Dimensions: 60mm x 40mm x 80mm long and 4mm thick), secured to the base wall studs using one $\varnothing 5.5$ x 63 mm self-drilling stainless steel screw accompanied by a $\varnothing 23.5$ mm washer. Additional bracket fixed horizontally at the top of the specimen. When attached to a concrete or masonry wall, equivalent fastening must be designed by a licensed design professional.
- 6. BRACKETS 2:** 6063-T66 aluminum L-section bracket (Dimensions: 60mm x 40mm x 150mm long and 4mm thick), secured to the base wall studs, 1292mm above the opening sill, using one $\varnothing 5.5$ x 63 mm self-drilling stainless steel screw accompanied by a $\varnothing 23.5$ mm washer. When attached to a concrete or masonry wall, equivalent fastening must be designed by a licensed design professional.
- 7. T-SECTION PROFILE:** 6061-T6 aluminum T-section studs (Dimensions: 52mm x 40mm and 2mm thick), affixed to Bracket 1 and 2 using two $\varnothing 5.5$ x 25 mm self-drilling stainless steel screws.
- 8. HANGING RAIL:** 6063-T5 aluminum hanging rail (Dimensions: 60mm high and 3mm thick), mounted horizontally on top of the T-profile using one $\varnothing 5.5$ x 25 mm self-drilling stainless steel screw, spaced max. 614mm (aligned to hanging hook).



- 9. HANGING HOOK:** 6063-T5 aluminum hanging hook (Dimensions: 50mm x 69mm high and 4.8mm thick), attached to the rear side of the NATURCLAD-W F Panels (spaced at the top, middle and bottom of the exterior cladding panel) using two Ø6 x 11 mm austenitic stainless-steel body and carbon steel mandrel. Each hanging hook has a Ø 5.3 x 25 mm stainless steel hex bolt, to facilitate leveling adjustments.
- 10. OPENINGS:** Window openings are covered with one layer of exterior sheathing boards (ITEM 1A.c). L-shape galvanized steel profile flashings of 2mm thickness and 260.5mm x 50mm section, must be installed around the window opening utilizing twenty Ø 3.5 x 65mm self-drilling screws on both the header and sill. The screws are positioned approximately 220mm apart, 25mm from the interior side of the base wall, and 65mm from the adjacent screw. Additionally, the flashing on both jambs is secured with a total of eight screws, maintaining the same spacing. The window flashing shall extend 20mm from the surface of the panels. See Figure 03 for vertical section and Figure 04 for horizontal section. In addition, an L-shaped steel secondary piece, composed of the same

material and thickness, shall be employed at the corners of the flashing to ensure complete closure. These secondary pieces must be secured to the window flashing using one (1) Ø5.5 x 25mm screw on each side.

The top perimeter flashing is covered with L-shape galvanized steel profile flashings of 2mm thickness and 143mm x 50mm section, affixed to Bracket 1 using two Ø 3.5 x 35mm self-drilling screws at each bracket location. See Figure 05.

11. EXTERIOR CLADDING PANELS

CERTIFIED PRODUCT: Parklex Prodema USA, Inc. NATURCLAD-W F Panels.

8mm thick NATURCLAD-W F High Pressure Laminate (HPL) panels have nominal max. dimensions of 8 ft. (2440mm) in length and 4 ft. (1220mm) in height. The panels are mounted to the hanging rails by the hanging hooks secured to the back of the panels. The panels must be installed with a max. of 8mm open vertical and horizontal joints.

Note: All dimensions are in millimeters unless otherwise specified. Imperial equivalents are approximate and provided for reference only.

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.